

REMARKS

The Applicant received the Office Action of September 21, 2005. Briefly, the Office objected to the claims 2, 18, 20 and 25 because of informalities.

The Office rejected claims 1-5, 7, 9, 13, 14 and 20-27 under 35 U.S.C. 112, rejected claims 6-12 and 14 under 35 U.S.C. 102(e) as being anticipated by Kilawee et al (U.S. Patent 6,656,353) rejected claims 15,17, 20 and 22 under 35 U.S.C. 102(e) as being anticipated by Brandreth, III (U.S. Patent 6,855,252).

Finally, the Office noted that claims 1-5 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112 set forth in this Office Action and to include all of the limitations of the base claim and any intervening claims. Claims 16, 18, 19, 21, 23 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims.

Objection

Claims 2, 18, 20 and 25 were objected to because of informalities. Specifically, the Office stated on page 2, lines 1-5:

“... in claim 2, “removable mounted” should be “removably mounted”; in claim 18, “at least two dispensing devices...for holding at least two dispensing devices appears to be in error; in claim 20 “filer” should be “filter”; in claim 25 “permit to hand removal” should be “permit hand removal”.

The Applicant amended claim 2 by replacing “removable mounted” with “removably mounted”. Claim 18 was also amended by removing the following words in line two of the claim “for holding at least two dispensing devices thereon”. The typographical error, “filer”, in claim 20 was corrected to “filter” and the additional word “to” in claim 25 was removed. The Applicant also recognized and corrected a typographical error in claim 6. Specifically, “locate” was changed to “located”.

These changes are reflected in the attached version of amendment. It is submitted that the objections have been overcome by the amendments of each claim.

Rejection under 35 U.S.C. 112

The Office rejected claims 1-5, 7, 9, 13, 14 and 20-27 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention.

More specifically, the Office pointed out that in claim 1, the last two lines are awkward and incomprehensible. To provide clarity, the Applicant amended claim 1 to read:

“An activity enhanced liquid system for a contained liquid volume located in a transition region comprising:
a gate pivotally mounted in a liquid container; and
a dispensing device secured to said gate with said dispensing device comprising a dispensing container having a liquid dispensable material contained therein for dispensing the liquid ~~dispensable~~ at a first rate when the gate is in a stationary condition and at a second rate when the gate pivots in response to waves in the liquid system.”

The Office also noted that in claim 2 “the containers” lacks antecedent basis. The Applicant amended claim 2 to call for “the dispensing container” and the claim reads:

“The liquid system of claim 1 wherein the ~~containers are~~ dispensing container is removably removable mounted on said gate and ~~each of the dispensing container is~~ containers are located below a liquid line of the liquid container.”

In claim 7, the Office stated that “said liquid inlet” lacks antecedent basis and “the dispensing” should read “the dispensing device”. As such, claim 7 was amended to call for “a liquid inlet” and “the dispensing device”. Amended independent claim 7 now reads:

“The liquid system of claim 6 including a member for frictionally engaging ~~said a~~ liquid inlet and said dispensing device to hold the dispensing device in the liquid flow path as liquid enters said inlet.”

The Office also asserted that in claim 9, “the liquid inlet” lacks antecedent basis. Claim 9 was amended to call for “a liquid inlet”:

“The liquid system of claim 6 wherein the dispensing device includes a set of fingers for frictionally engaging ~~the~~ a liquid inlet.”

In claims 13 and 14, “the dispenser housing” lacks antecedent basis and therefore, claims 13 and 14 were amended to call for “a dispenser housing.”

In claim 20, the Office cited that “the dispersant” lacked antecedent basis. Claim 20 was amended to call for “a dispersant”.

The Office noted that in claim 25, “the dispensers” lacks antecedent basis and the Applicant amended claim 25 to call for “a dispenser”. Additionally, the Applicant changed “wherein the dispenser contain” to “including a dispenser containing” and removed the word “filter” from “filter cap” for consistency. Claim 25 now reads:

“The liquid system of claim 20 ~~wherein the dispensers contain~~ including a dispenser containing a finger grip to permit ~~to~~ hand removal of the dispensers from the ~~filter~~ cap.”

Finally, the Office stated that in claims 26 and 27, “the filter” lacks antecedent basis. In line 1 of both claims the word “housing” was added after filter. Additionally, in line 2 of both claims, the “a filter housing” was changed to “the filter housing”. Amended claim 26 reads:

“The liquid system of claim 20 wherein the filter housing is located on a high pressure side of ~~a~~ the filter housing.”

And amended claim 27 reads:

“The liquid system of claim 20 wherein the filter housing is located on the low pressure side of ~~a~~ the filter housing.”

It is submitted that the Applicant has overcome the Office’s rejection of claims 1, 2, 7, 9, 13, 14 and 20 and 25-27 under 35 U.S.C. 112 by the aforementioned amendments, which are reflected in the version of amendment showing markings. It is further submitted that the Applicant has overcome the Office’s rejection of dependent claims 3-5 and 21-24 by the amendments made to associated independent claims 1 and 20, respectively.

Rejection under 35 U.S.C. 102(e)

The Office rejected claims 6-12 and 14 under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent No. 6,656,353 to Kilawee et al. The Examiner stated on page 3, lines 9-16:

“Kilawee et al teach a device comprising a liquid conduit, a dispenser mounted on a wall of the conduit, a liquid dispensable material, wherein the rate of dispensable material dispensed varies with the flow of liquid as it is controlled by a bypass and controller. Securing members are shown to frictionally secure the dispenser to the conduit, and may be considered “fingers”, which wrap around the outside of the conduit. The device is capable of holding any kind of solid dispensing material, including an ion generation material. The conduit is both a liquid inlet and liquid outlet.”

Kilawee et al show a Venturi feeder bypass and control apparatus. Referring to Figure 1 and column 7, line 57 – column 8, line 4, Kilawee et al describe the Venturi feeder bypass in operation. Specifically, the liquid enters the inlet port 33 and flows through fluid conduit 28. The Venturi flow effect then causes the water to flow through passageway 36, passing through apertures 23 and into container 16. The water in container 16 dissolves the chemical 60 thus creating a solution, which is passed upward through fluid passageway 42 and back into flow conduit 28 and ultimately exiting through outlet port 34. To summarize, Kilawee et al show a dispensing device whereby the liquid stream flows through an inlet port, fluid conduit, passageway and aperture before reaching the dispensing container.

The Applicant amended independent claim 6 to call for “a liquid conduit for directing a liquid stream therethrough” and “a dispensing device located in a transition region with said dispensing device secured to said liquid conduit so as to maintain the dispensing device directly in the liquid stream”. Specifically, independent claim 6 was amended to:

“A liquid system for a contained liquid volume comprising:
a liquid conduit for directing a liquid stream therethrough;
a dispensing device ~~locate~~ located in a transition region with said dispensing device secured to said liquid conduit so as to maintain the dispensing device directly in the liquid stream with said dispensing device comprising a dispensing container having a liquid dispensable material contained therein for dispensing the liquid dispensable material at a first rate when there is no liquid flow through the liquid conduit and at a second rate in response to liquid flowing through the liquid conduit.”

It is submitted that Kilawee does not have “a liquid conduit for directing a liquid stream therethrough” and

“a dispensing device located in a transition region with said dispensing device secured to said liquid conduit so as to maintain the dispensing device directly in the liquid stream” and therefore independent claim 6 is not anticipated by Kilawee et al. It is further submitted that since amended independent claim 6 is in condition for allowance, it follows that dependent claims 7-12 and 14 are in condition for allowance.

The Office also rejected independent claim 15 and dependent claim 17 under 35 U.S.C 102(e) as being anticipated by U.S. Patent No. 6,855,252 to Brandreth, III. The Office states on page 3, lines 18-25:

“Referring to the figures, Brandreth, III teaches a dispenser comprising a filter housing 100, a filter 53, retainer or “end cap” 78, stand 60, dispensing device 38, and dispensable material 40. It is submitted that dispensable material 40 is not dispensed if it doesn’t come into contact with water, and therefore it has a dispensing rate of zero without a water flow rate, and a higher dispensing rate with a water flow rate. It is also submitted that since material 40 can be a chemical of “any soluble type”, then an ion yielding material is within the scope of, and encompassed by, the material of Brandreth, III.”

Brandreth, III teaches a device for delivering chemical solutions into a liquid flow. Referring to Figure 3 and column 7, lines 11-59, he shows a support member positioned proximate the inflow end 71. What's more, the filter retainer means or end cap 78 is disposed on the outflow side of the filter means. That is, the support member 75 and the filter retainer means or end cap 78 are located on opposite ends of the chemical dispenser device 100.

Applicant amended independent claim 15 to specifically call for a central passage located in the end cap and a support member, having a base for securement to the end cap. Amended claim 15 is:

“A liquid system for a contained liquid volume comprising:
a filter housing;
a filter having an end cap located in said housing;
a central passage located in the end cap;
a support member, said support member having a base for securement to said end cap;
a stand positioned proximate said filter; and
at least two a dispensing device devices secured to said stand with each of said dispensing device devices comprising a dispensing container having a liquid dispensable material contained therein for dispensing the liquid dispensable material at a first rate when there is no flow past the filter and at a second rate in response to liquid flowing through the filter.”

It is submitted that Brandreth, III does not show a liquid system having “a central passage located in the end cap” support member, said support member having a base for securement to said end cap” since his teachings are the support member and end cap on opposite ends of the dispensing device. Therefore, independent claim 15 is allowable. It is further submitted that since amended independent claim 15 is in condition for allowance and it follows that dependent claim 17 is in condition for allowance.

The Applicant also amended dependent claim 16 to call for the liquid system of 15 wherein said base is a resilient base. This change is reflected in version of amendment showing markings.

Finally, the Office rejected claims 20 and 22 under 35 U.S.C. 102(e) as being anticipated by Brandreth, II. Specifically, the Office asserts on page 3, line 27 – page 4, line 4:

“Brandreth, III teaches the device described above. The cartridge retainer means, 60, shown in Figure 1 may be considered a cap on a housing 53, which comprises filter material. The means 60 has an opening for dispenser at a rate of zero without water flow, or a higher flow rate with water flow.”

Applicant disagrees; means 60 does not have an opening as evidenced by the sectional view of Figure 2 and Figure 3, which show a solid section. Brandreth, III shows, in Figure 1, a dispenser cartridge 33 with a cap member 39. The removable cap member 39 is sized to fit the open-end top 35. In order to further distinguish claim 20 from Brandreth, III, claim 20 has been amended to include a sealing member, since Brandreth, III does not show a sealing member. Amended independent claim 20 now reads:

“A liquid system for a contained liquid volume comprising:
a dispenser;
a liquid filter housing having a chamber therein;
a cap on said liquid ~~filter~~ filter housing; ;
a sealing member for sealing said cap to said dispenser, said cap having an opening therein
for mounting a dispenser ~~thereto with the dispenser~~ able to permit liquid flowing therethrough to generate the dispersant at a second rate when the liquid is flowing through said liquid filter housing and at a first rate when the liquid is not flowing though said liquid filter housing.”

In view of the above, it is submitted that amended independent claim 20 is in condition for allowance. It is further submitted that dependent claim 22 is in condition for allowance.

The Office stated that dependent claim 21 would be allowable if rewritten in independent form including all of the limitations of claim 20, because the prior art of record fails to teach, disclose, or fairly suggest a liquid system comprising a dispenser with a set of threads as recited in the claim. Thus, the Applicant has rewritten claim 21 as an independent claim. Amended independent claim 21 now reads:

“A liquid system for a contained liquid volume comprising:
a liquid filter housing having a chamber therein;
a cap on said liquid filter housing, said cap having an opening therein for mounting a
dispenser thereto with the dispenser able to permit liquid flowing therethrough to generate the
dispersant at a second rate when the liquid is flowing through said liquid filter housing and at a
first rate when the liquid is not flowing through said liquid filter housing; and
including a dispenser having a set of threads thereon for thread engagement with a set of
threads extending around the opening in said cap.”

Regarding dependent claim 23, the Applicant amended claim 23 by changing “including a” to “wherein the” and changing “having” to “includes”. Amended claim 23 reads:

“The liquid system of claim 20 ~~including a~~ wherein the dispenser ~~having~~ includes a flange
and a sealing ring for sealing the dispenser to said cap.”

The Office stated that dependent claim 23 would be allowable if rewritten in independent form including all of the limitations of claim 20, because the prior art of record fails to teach, disclose or fairly suggest a liquid system comprising a dispenser having a flange and sealing ring as recited in the claim. Independent claim 20 was amended and it is submitted claim 20 is in condition for allowance. It is further submitted that dependent claim 23, dependent upon amended independent claim 20, is in condition for allowance.

Finally, the Office asserted on page 5, lines 13-17 that:

“Claim 24 would be allowable if rewritten in independent form including all of the
limitations of claim 20, because the prior art of record fails to teach, disclose or fairly
suggest a liquid system comprising at least two dispensers mounted in the cap with each
extending partially in the chamber, in combination with all of the limitations of claim 20.”


The Applicant has rewritten claim 24 in independent form. Amended independent claim 24 is:

“A liquid system for a contained liquid volume comprising:
a liquid filter housing having a chamber therein;
a cap on said liquid filter housing, said cap having an opening therein for mounting
a dispenser thereto with the dispenser able to permit liquid flowing therethrough to
generate the dispersant at a second rate when the liquid is flowing through said liquid filter
housing and at a first rate when the liquid is not flowing through said liquid filter housing;
and
wherein at least two dispensers are mounted in said cap with each extending
partially into the chamber.”

In view of the above, it is submitted that claims 1-27 are allowable and a notice of allowance, as amended, is respectfully requested. Applicant has enclosed a marked up version of the amendment with this response.

Due to amendments to the claims, there are now six independent claims. That is, there are 2 additional independent claims than submitted in the original application. A PTO-2038 form is included with this amendment in the amount of \$200.00. Please charge any additional fees to deposit account 10-0210.

Respectfully submitted,
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Enclosures



VERSION OF AMENDMENTS SHOWING MARKINGS

In the Claims

1. (Currently Amended) An activity enhanced liquid system for a contained liquid volume located in a transition region comprising:
 - a gate pivotally mounted in a liquid container; and
 - a dispensing device secured to said gate with said dispensing device comprising a dispensing container having a liquid dispensable material contained therein for dispensing the liquid ~~dispensable~~ at a first rate when the gate is in a stationary condition and at a second rate when the gate pivots in response to waves in the liquid system.
2. (Currently Amended) The liquid system of claim 1 wherein the ~~containers are~~ dispensing container is removably ~~removable~~ mounted on said gate and ~~each of the~~ dispensing container is ~~containers are~~ located below a liquid line of the liquid container.
3. (Currently Amended) The liquid system of claim 1 including at least two dispensing containers on said gate with at least one of said dispensing containers containing an ion generation material.
4. (Currently Amended) The liquid system of claim 1 including at least two dispensing containers on said gate with at least one of said dispensing containers containing a halogen.
5. (Currently Amended) The liquid treatment system of claim 1 including a pair of slotted channels for holding a the dispensing container on said gate and said gate comprises a weir in a swimming pool.
6. (Currently Amended) A liquid system for a contained liquid volume comprising:

a liquid conduit for directing a liquid stream therethrough;

a dispensing device ~~locate~~ located in a transition region with said dispensing device secured to said liquid conduit so as to maintain the dispensing device directly in the liquid stream with said dispensing device comprising a dispensing container having a liquid dispensable material contained therein for dispensing the liquid dispensable material at a first rate when there is no liquid flow through the liquid conduit and at a second rate in response to liquid flowing through the liquid conduit.

7. (Currently Amended) The liquid system of claim 6 including a member for frictionally engaging ~~said~~ a liquid inlet and said dispensing device to hold the dispensing device in the liquid flow path as liquid enters said inlet.

8. (Original) The liquid system of claim 6 including a diverter for controlling the amount of liquid flowing through said dispensing device.

9. (Currently Amended) The liquid system of claim 6 wherein the dispensing device includes a set of fingers for frictionally engaging ~~the~~ a liquid inlet.

10. (Original) The liquid system of claim 6 wherein the dispensing material comprises an ion generation material.

11. (Currently Amended) The liquid system of claim 6 wherein the conduit is ~~a~~ the liquid inlet for receiving a liquid stream from a body of water.

12. (Currently Amended) The liquid system of claim 6 wherein the conduit is a liquid outlet for directing ~~a stream of liquid~~ the liquid stream into a body of water.

13. (Currently Amended) The liquid system of claim 6 wherein ~~the~~ a dispenser housing is mounted in the conduit.
14. (Currently Amended) The liquid system of claim 6 wherein ~~the~~ a dispenser housing is mounted on a container wall.
15. (Currently Amended) A liquid system for a contained liquid volume comprising:
a filter housing;
a filter having an end cap located in said housing;
a central passage located in the end cap;
a support member, said support member having a base for securement to said end cap;
a stand positioned proximate said filter; and
at least two a dispensing device devices secured to said stand with each of said dispensing ~~device devices~~ comprising a dispensing container having a liquid dispensable material contained therein for dispensing the liquid dispensable material at a first rate when there is no flow past the filter and at a second rate in response to liquid flowing through the filter.
16. (Currently Amended) The liquid system of claim 15 ~~including a central passage located in the end cap; support member, said support member having a resilient base for securement to said end cap.~~ wherein said base is a resilient base.
17. (Original) The liquid system of claim 15 wherein the dispensing material comprises an ion yielding material.
18. (Currently Amended) The liquid system of claim 15 including at least two dispensing devices on said stand ~~for holding at least two dispensing devices thereon.~~

19. (Original) The liquid system of claim 18 wherein at least one of the dispensing devices contains a halogen and the other dispensing device includes a container for holding the liquid dispensable material therein, with the container having an outlet passage for liquid to flow therethrough while maintaining undispensed liquid dispensable material in the container.

20. (Currently Amended) A liquid system for a contained liquid volume comprising:

a dispenser;

a liquid filter housing having a chamber therein;

a cap on said liquid ~~filter~~ filter housing,;

a sealing member for sealing said cap to said dispenser, said cap having an opening therein for mounting a dispenser ~~thereto with the dispenser able to permit liquid flowing therethrough to~~ generate the dispersant at a second rate when the liquid is flowing through said liquid filter housing and at a first rate when the liquid is not flowing though said liquid filter housing.

21. (Currently Amended) ~~The liquid system of claim 20~~ A liquid system for a contained liquid volume comprising:

a liquid filter housing having a chamber therein;

a cap on said liquid filter housing, said cap having an opening therein for mounting a dispenser thereto with the dispenser able to permit liquid flowing therethrough to generate the dispersant at a second rate when the liquid is flowing through said liquid filter housing and at a first rate when the liquid is not flowing though said liquid filter housing; and

~~including~~ a dispenser having a set of threads thereon for thread engagement with a set of threads extending around the opening in said cap.

22. (Currently Amended) The liquid system of claim 20 ~~including a~~ wherein the dispenser ~~having~~ includes a housing containing an ion yielding material.

23. (Currently Amended) The liquid system of claim 20 ~~including a~~ wherein the dispenser ~~having includes~~ a flange and a sealing ring for sealing the dispenser to said cap.

24. (Currently Amended) ~~The liquid system of claim 20~~ A liquid system for a contained liquid volume comprising:

a liquid filter housing having a chamber therein;

a cap on said liquid filter housing, said cap having an opening therein for mounting a dispenser thereto with the dispenser able to permit liquid flowing therethrough to generate the dispersant at a second rate when the liquid is flowing through said liquid filter housing and at a first rate when the liquid is not flowing through said liquid filter housing; and

~~wherein~~ at least two dispensers are mounted in said cap with each extending partially into the chamber.

25. (Currently Amended) The liquid system of claim 20 ~~wherein the dispensers contain~~ including a dispenser containing a finger grip to permit ~~to~~ hand removal of the dispensers from the filter cap.

26. (Currently Amended) The liquid system of claim 20 wherein the filter housing is located on a high pressure side of ~~a~~ the filter housing.

27. (Currently Amended) The liquid system of claim 20 wherein the filter housing is located on the low pressure side of ~~a~~ the filter housing.